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## PREVALENCE OF INFLUENZA IN THE UNITED STATES

In all sections of the country the number of cases of influenza reported in January has exceeded the seasonal expectancy. In the Middle Atlantic and East South Central areas the number of cases reported declined during the last 2 weeks of the month; that is, since January 17. The New England, East North Central, West North Central, and South Atlantic sections showed a decrease in the number of reported cases for the fourth week, January 24 to January 30. The West South Central, Mountain, and Pacific sections, however, have reported an increasing number of cases throughout January. The largest increase in cases, since January 17, was reported in the Pacific section.

Mortality from all causes in 86 large cities (table 1) likewise has shown an excess in all sections during January. In the East Central and Atlantic Coast States there has been only a slight excess in mortality from all causes, the peak of which was reached by the week ended January 9. Mortality is still high, however, in the New England and South Atlantic States. Death rates for the West North Central section show a decided excess over seasonal expectancy, particularly for the weeks ended January 16 and January 23. The West South Central section has had high rates of mortality throughout January, with no definite peak week. In the Mountain section the death rate from all causes was 29.1 per 1,000 for the week ended January 9, but declined to 22.7 for the week ended January 30. In the Pacific section the death rate has increased throughout January to 21.6 per 1,000 for the week ended January 30.

The small outbreak of influenza which started in the West South Central section in December and spread eastward across the Northern States and westward to the Pacific coast has been mild in the East and somewhat more severe in the West North Central, Mountain, and Pacific sections. Both reported cases and mortality from all causes indicate that during the latter part of January the epidemic declined in all sections of the country except the Pacific coast area.

The latest preliminary reports show 32,078 cases for the week ended February 6, as compared with 36,742 cases for the week ended January 30 and 35,953 for the week of January 23. The largest

increases for the week ended February 6 are shown for the following named widely separated States: Maine, West Virginia, and Texas. Most of the other States recorded decreases, with a few showing only slight increases. These figures are exclusive of Kentucky, and of Kentucky and Louisiana for the week of January 6.

TABLE 1.—Mortality from all causes in 86 large cities<sup>1</sup> of 9 geographic areas of the United States, Dec. 13, 1936, to Jan. 30, 1937

Week ended—	All cities		New England (14 cities)	Middle Atlantic (16 cities)	East North Central (18 cities)	West North Central (8 cities)	South Atlantic (7 cities)	East South Central (5 cities)	West South Central (7 cities)	Mountain (2 cities)	Pacific (9 cities)
	Current week	Corresponding week of 1933-34									
DEATH RATE PER 1,000 PERSONS											
Dec. 19.....	12.9	11.9	14.4	12.2	11.9	12.7	16.4	14.0	14.0	15.5	13.3
Dec. 26.....	11.9	12.1	13.5	10.9	11.7	12.4	14.2	11.9	12.2	13.0	12.6
Jan. 2.....	14.4	12.2	15.2	13.5	14.2	14.1	18.6	18.3	15.3	19.1	13.6
Jan. 9.....	15.8	13.0	15.8	15.3	14.7	17.7	18.7	17.2	14.4	29.1	16.2
Jan. 16.....	15.4	12.8	15.5	15.1	13.2	19.0	18.7	15.4	15.2	28.4	16.8
Jan. 23.....	14.8	12.3	15.4	14.4	11.5	18.7	16.5	15.0	15.1	27.5	19.0
Jan. 30.....	14.9	12.2	15.4	14.0	11.9	16.7	17.5	14.3	16.4	22.7	21.6

<sup>1</sup> Cities of over 100,000 population in 1930.

## INFLUENZA IN EUROPE

The following reports, though fragmentary, give some information regarding the prevalence of influenza in Europe. They are taken from the Weekly Epidemiological Record for January 21, 1937, issued by the Health Section of the League of Nations.

*England and Wales.*—For the 3 weeks ended January 9, 464 deaths from influenza were reported in London. The duration of the illness has been from 4 to 10 days, with fever and respiratory and gastrointestinal symptoms, the latter being of severe type in some instances.

*Austria.*—No abnormal prevalence was reported up to January 13.

*Germany.*—During the week ended January 2, the number of deaths from influenza recorded in 57 towns of more than 100,000 population decreased from 512 to 433, but the number of deaths from pneumonia increased from 581 to 637 and the general mortality rate from 14.2 to 14.7 per 1,000 population.

*Denmark.*—On January 11 the mild epidemic was reported to be diminishing rapidly. During December, 102,788 cases were reported, with a morbidity rate of 38.6 per 100,000 in Copenhagen, 36.0 in other towns, and 20.6 in the rural districts. For the week ended January 2, 1937, the number of cases in Copenhagen decreased from 3,618 (for the preceding week) to 2,674, while the number of deaths from influenza increased to 27 (as compared with 25 for the preceding

week), and the general mortality rate decreased from 18.9 to 15.6 per 1,000.

*Scotland.*—For the week ended January 9 the number of primary and acute pneumonia cases increased from 249 to 404, and that of acute influenzal pneumonia from 68 to 211. During the week ended January 16 the number of deaths from influenza in 16 towns increased from 185 to 220, in Glasgow from 33 to 131, and in Edinburgh from 12 to 36. The number of deaths from all respiratory disease increased in the 16 towns from 186 to 233, and the general death rate from 20.2 to 23.8.

*Finland.*—In the second half of December 1,336 cases of influenza were recorded, of which number 217 occurred at Helsingfors.

*Hungary.*—From January 10 to 16, 32 cases of influenza with complications were reported in Hungary, 6 of which were in Budapest.

*Irish Free State.*—January 3–9, deaths from influenza in 13 towns, 10; deaths from pneumonia, 23. The general mortality rate for the 13 towns was 15.5 per 1,000; for Dublin, 15.2.

*Northern Ireland.*—During the week ended January 16, the number of influenza deaths in Belfast rose from 17 to 46, the number of deaths from pneumonia from 20 to 35, and the number of deaths due to other respiratory diseases from 28 to 40. The death rate for the week was 34.8 per 1,000 as compared with 22.1 for the preceding week.

*Norway.*—For the weeks ended December 26, 1936, January 2, and January 9, 1937, the numbers of cases of influenza reported at Oslo were 134, 126, and 271, and the general mortality rate was 8.3, 15.6, and 15.4 per 1,000, respectively.

*Netherlands.*—For the week ended January 9, as compared with the preceding week, the number of deaths from influenza increased from 41 to 58, and the general death rate from 16.8 to 19.1 per 1,000.

*Poland.*—Notification of influenza is not compulsory in Poland, but the disease is reported to have prevailed in mild epidemic form in December 1936, and according to information dated January 20, 1937, a severe type was prevailing in Warsaw, with pulmonary complications being frequent and occasionally fatal.

*Sweden.*—Between December 20, 1936, and January 9, 1937, the weekly numbers of cases reported in Stockholm were 7, 16, and 35, and the general mortality rate was 8.7, 11.3, and 15.9 per 1,000.

*Switzerland.*—Only sporadic cases of influenza had been reported, but notification of influenza is not generally compulsory except in case of obvious epidemic.

## STUDIES IN CHEMOTHERAPY

## III. THE EFFECT OF p-AMINO BENZENE SULPHONAMIDE ON PNEUMOCOCCI IN VITRO

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It has previously been shown that p-aminobenzene sulphonamide possesses curative action in experimental pneumococcus infections in mice (1). This compound, along with Prontosil and Prontosil soluble, has been found effective experimentally and clinically against infections with hemolytic streptococci. A recent review of the literature is given by Domagk (2), to whom the original discovery of Prontosil is due. In our experiments the action of sulphonamide on pneumococci *in vivo* was not to any appreciable extent shared by Prontosil or Prontosil soluble.<sup>1</sup>

A study of the action of sulphonamide<sup>2</sup> on organisms *in vitro* has shown that this compound possesses marked bactericidal and bacteriostatic power against pneumococci,<sup>3</sup> while no such effects were present on hemolytic streptococci, *Staphylococcus albus*, and *E. coli*.

## METHOD

Dilutions of sulphonamide base were made in plain broth of pH 7.3. The drug is soluble to 0.8 percent, and glass electrode determinations showed that the pH was unchanged after 24 hours' incubation. The tubes were inoculated with 2 drops of an 18-hour broth culture of the organisms. After 24 hours' incubation, transfers of 2 drops were made into broth tubes containing similar concentrations of sulphonamide; transfers were also made into broth without the drug, to test for viable organisms. This was continued for 5 or 6 days, and all cultures were observed 1 week for the presence of growth.

In the case of streptococci, 2 percent (neopeptone) broth was employed, in which medium these organisms grew abundantly.

## RESULTS

Six highly virulent strains of pneumococci were employed—Mulford, types I, II, and III; Lederle, type I, an Institute strain (NIH), type I, and a type III strain recently isolated from pneumonia in man and sent us by Dr. J. C. Bullowa. Inhibition of growth and death of the organisms in 24 to 48 hours occurred in all strains with the presence of the drug in dilutions of 1 to 1,000 and 1 to 10,000.

<sup>1</sup> Prontosil is 4-sulphonamide 2-4-diaminobenzol; Prontosil soluble is 4-sulphonamide-phenyl-2-azo-7-acetyl amino-1-hydroxynaphthalene 3, 6 sodium disulphonate.

<sup>2</sup> In this paper sulphonamide refers to p-aminobenzene sulphonamide. It is now available commercially under the name "Prontylin" (Winthrop Chemical Co.).

<sup>3</sup> Dr. Sara E. Branham, of this Institute, has shown that a similar action is present on meningococci.



Inhibition of growth occurred in five of the six strains with dilutions of 1 to 100,000, while with 4 of them sterilization of cultures was obtained on the first to third day at this dilution. Four strains were tested at dilutions of 1 to 500,000. In one case sterilization of cultures was obtained on the second day, in one there was inhibition of growth only, while with the other two cases no visible effect was produced (table 1).

TABLE 1.—*The bacteriostatic and bactericidal action of p-aminobenzene sulphonamide against 6 strains of pneumococci. (This action is destroyed by acetylation of the compound)*

Strain of pneumococci and day	Dilution of drug								Controls	Acetylated sulphonamide 1:1,000
	1:1,000	Subculture	1:10,000	Subculture	1:100,000	Subculture	1:500,000	Subculture	1:1,000,000	
<b>Bullowa III:</b>										
1st day.....	0	0	0	0	0	0	10	10	+++	---
2d day.....	0	0	0	0	0	0	10	10	+++	---
3d day.....	0	0	0	0	0	0	10	10	+++	---
4th day.....	0	0	0	0	0	0	10	10	+++	---
5th day.....	0	0	0	0	0	0	10	10	+++	---
<b>Mulford II:</b>										
1st day.....	++	++	++	++	<sup>1</sup> ±	0	++	++	+++	---
2d day.....	0	0	0	0	0	0	10	0	+++	---
3d day.....	0	0	0	0	0	0	0	0	+++	---
4th day.....	0	0	0	0	0	0	0	0	+++	---
5th day.....	0	0	0	0	0	0	0	0	+++	---
<b>Mulford III:</b>										
1st day.....	±	10	+	10	+++	+++	+++	+++	+++	+++
2d day.....	0	0	0	10	10	++	++	++	+++	+++
3d day.....	0	0	0	0	10	++	++	++	+++	+++
4th day.....	0	0	0	0	10	++	++	++	+++	+++
5th day.....	0	0	0	0	+	+	++	++	+++	+++
<b>Lederle I:</b>										
1st day.....	0	10	0	10	+	+++	+++	---	+++	+++
2d day.....	0	0	0	0	++	+++	---	---	+++	+++
3d day.....	0	0	0	0	+++	+++	---	---	+++	+++
4th day.....	0	0	0	0	+++	+++	---	---	+++	+++
5th day.....	0	0	0	0	+++	+++	---	---	+++	+++
<b>Mulford I:</b>										
1st day.....			±	+	+++	+++			+++	---
2d day.....			10	10	10	10			+++	---
3d day.....			0	0	0	0			+++	---
4th day.....			0	0	0	0			+++	---
5th day.....			0	0	0	0			+++	---
<b>NIH I:</b>										
1st day.....			0	10	±	10			+++	---
2d day.....			0	0	0	0			+++	---
3d day.....			0	0	0	0			+++	---
4th day.....			0	0	0	0			+++	---
5th day.....			0	0	0	0			+++	---

<sup>1</sup> = ++ after 48 to 96 hours' incubation.

In a previous report (1) on the curative effect of p-aminobenzene sulphonamide on pneumococcus infections in mice it was shown that acetylation of this compound destroyed its chemotherapeutic action. Likewise in the test tube the acetyl compound in dilutions of 1 to 1,000 did not influence the growth of two strains of pneumococci upon which tests were made (table 1). Also inactive in the body (1) and in the

test tube was Prontosil soluble, a diazotized sulphonamide. Pneumococcus strains Mulford I and II showed no inhibition of growth after 5 daily transfers in broth containing 1 to 500 dilution of Prontosil soluble.

#### EFFECT UPON OTHER ORGANISMS

Sulphonamide in dilutions of 1 to 1,000 had no bactericidal or bacteriostatic effect upon four strains of virulent hemolytic streptococci grown in 2 percent neopeptone broth<sup>4</sup> (table 2). The only effect observed was that after 3 or 4 days' growth (with daily transfer) in the presence of the drug the organisms grew in long chains and flocculated at the bottom of the test tube. After 5 days in the presence of the drug, tests upon mice showed no appreciable loss of virulence. Blood agar plate cultures were examined by Dr. Alice C. Evans, who found no difference from the controls in the appearance of the colonies. Also, when transferred after the fifth day to broth without the drug, the organisms grew without flocculation.

TABLE 2.—The lack of inhibition of growth of *p*-aminobenzene sulphonamide on 4 strains of hemolytic streptococci

Streptococcus and dilution	First day	Second day	Third day	Fourth day	Fifth day
<i>Strep. 1779</i>					
Control.....	+++	+++	+++	+++	+++
1:1000 sulphonamide.....	+++	+++	+++	+++	+++
<i>Strep. 823</i>					
Control.....	+++	+++	+++	+++	+++
1:1000 sulphonamide.....	+++	+++	+++	+++	+++
<i>Strep. 778</i>					
Control.....	+++	+++	+++	+++	+++
1:100 sulphonamide.....	+++	+++	+++	+++	+++
<i>Strep. 1685</i>					
Control.....	+++	+++	+++	+++	+++
1:2000 sulphonamide.....	+++	+++	+++	+++	+++

<sup>1</sup> Organisms flocculated at bottom of tube.

<sup>2</sup> Subculture +++.

Cultures of *Staphylococcus albus* and *E. coli* were grown in plain broth in the presence of sulphonamide (1 to 1,000) with daily transfers for 1 week; no difference from the control cultures was observed (table 3).

<sup>4</sup> Since this was written, papers have appeared by Long and Bliss (*J. Am. Med. Assoc.*, 108:32 (1937)) and by Colebrook, Buttle, and O'Meara (*Lancet*, 2: 1323 (1936)) showing that inhibitory effects on the growth of streptococci can be demonstrated for sulphonamide if a small number of streptococci are inoculated into the culture medium. No effect was obtained with an inoculum similar to ours.

TABLE 3.—*The absence of effect of p-aminobenzene sulphonamide upon growth of Staphylococcus albus and E. coli*

Organism and dilution	First day	Second day	Third day	Fourth day	Fifth day
<i>E. coli</i>					
Control.....	+++	+++	+++	+++	+++
1-1,000 sulphonamide.....	+++	+++	+++	+++	+++
<i>Staph. albus</i>					
Control.....	+++	+++	+++	+++	+++
1-1,000 sulphonamide.....	+++	+++	+++	+++	+++

## DISCUSSION

The bacteriostatic and bactericidal action of sulphonamide on pneumococci *in vitro* is adequate to explain its chemotherapeutic effect in animals.<sup>4</sup> The nature of this action *in vitro* is unusual in that the drug is not an antiseptic in the usual sense. The specificity of its action upon certain organisms, as well as its low toxicity for animals, differentiates it from the class of antiseptics that are general protoplasmic poisons.

These results are interesting from the point of view of action upon streptococci. Thus the drug is more effective against streptococci than pneumococci in animals but not inhibitory to growth of streptococci in the test tube.<sup>5</sup> Levaditi and Vaisman (3) have shown a neutralizing effect from Prontosil upon the leucocidins and hemolysins of streptococci *in vitro*, but the mode of action has been inadequately explained (2). Domagk suggests among other possibilities that these compounds may be converted into active agents in the body, and the demonstration that sulphonamide itself can be active *in vitro* against some organisms lends support to such a belief. The fact that in our experiments diazotization and acetylation of the sulphonamide compound destroy its activity both in the body and in the test tube is evidence that the mode of action is the same in both cases. Fourneau, Trefouel, Nitti, and Bovet (4) have shown a retardation of growth of molds by certain sulphonamide compounds, and this action was found to be related to the antistreptococcic activity of these compounds in animals.

## CONCLUSIONS

p-aminobenzene sulphonamide has been found to be bactericidal and bacteriostatic to pneumococci in high dilutions *in vitro*.

The lack of effect upon the growth of streptococci, *Staphylococcus albus*, and *E. coli*, previously shown by other workers for Prontosil, was likewise established for p-aminobenzene sulphonamide.

<sup>4</sup> The dose required in animals is 1 gm per kilo or greater so that concentrations can be reached in the body within the range effective in the test tube.

## REFERENCES

- (1) Rosenthal, S. M.: Pub. Health Rep., 52: 48-53 (1937).
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- (3) Levaditi, C., and Vaisman, A.: Compt. Rend. Soc. Biol., 120: 1077 (1935).
- (4) Fourneau, E., Trefouel, J., Nitti, F., and Bovet, D.: Compt. Rend. Soc. Biol., 122: 652 (1936).

## DEATH RATES AND BIRTH RATES, BY STATES, 1934 AND 1935 AND SUMMARY FOR THE REGISTRATION AREAS, 1920-35

According to figures compiled by the Bureau of the Census, Department of Commerce, there were 1,392,752 deaths in the United States in 1935, as compared with 1,396,903 in 1934, giving death rates of 10.9 and 11.0 per 1,000 estimated population for these years, respectively. The accompanying tables and statements were recently issued by the Bureau of the Census.

It is stated that the high death rates shown for Arizona, New Mexico, and Nevada are due in large measure to an excess in the number of nonresident deaths from tuberculosis, while those in the New England area are due largely to the relatively greater advanced age of the population. The variations in the birth rates for the different States or geographical areas are due to a combination of biological and social factors, such as race, age of population, and fertility.

The second table presents a summary of the data for births and deaths for the birth and death registration areas for each year since and including 1920. Prior to 1933 the registration areas did not include the same States. Beginning with 1933, however, both areas have included all of the States.

Both birth and death rates have declined in the last 15 years, but the infant mortality rate has also been lowered, and to a greater degree, decreasing almost one-third during this period.

### Summary of natality and mortality data for each State, 1935 and 1934

Area	Estimated population July 1		Total births		Total deaths		Rate per 1,000 estimated population			
							Births		Deaths	
	1935	1934	1935	1934	1935	1934	1935	1934	1935	1934
United States.....	127,521,000	126,626,000	2,155,105	2,167,636	1,392,752	1,396,903	16.9	17.1	10.9	11.0
Alabama.....	2,834,000	2,805,000	62,239	63,495	28,585	29,361	22.0	22.6	10.1	10.5
Arizona.....	406,000	406,000	9,139	8,492	5,077	5,647	22.5	20.9	15.0	13.9
Arkansas.....	1,999,000	1,976,000	35,684	37,515	16,176	16,888	17.9	19.0	8.1	8.5
California.....	5,997,000	5,937,000	80,131	78,346	72,456	68,095	13.4	13.2	12.1	11.5
Colorado.....	1,062,000	1,058,000	18,837	17,849	13,134	12,497	17.7	16.9	12.4	11.8
Connecticut.....	1,717,000	1,700,000	22,258	22,215	17,659	17,438	13.0	13.1	10.3	10.2
Delaware.....	256,000	253,000	4,069	3,998	3,206	3,354	15.8	16.8	12.5	13.3
District of Columbia.....	594,000	560,000	10,803	10,137	8,483	8,274	18.2	18.1	14.3	14.5
Florida.....	1,614,000	1,587,000	28,051	28,716	20,046	20,357	17.4	16.8	12.4	12.8



## Summary of natality and mortality data for each State, 1935 and 1934—Continued

Area	Estimated population July 1		Total births		Total deaths		Rate per 1,000 estimated population			
							Births		Deaths	
	1935	1934	1935	1934	1935	1934	1935	1934	1935	1934
Georgia.....	3,035,000	3,011,000	63,260	64,661	34,288	35,580	20.8	21.5	11.3	11.8
Idaho.....	479,000	473,000	9,469	9,373	4,531	4,377	19.8	19.8	9.5	9.3
Illinois.....	7,817,000	7,790,000	111,884	110,226	85,518	87,205	14.3	14.1	10.9	11.2
Indiana.....	3,429,000	3,400,000	52,909	52,349	39,515	40,650	15.4	15.4	11.5	12.0
Iowa.....	2,534,000	2,525,000	41,137	42,463	26,364	26,758	16.2	16.8	10.4	10.6
Kansas.....	1,878,000	1,870,000	30,589	32,463	20,334	19,951	16.3	17.4	10.8	10.7
Kentucky.....	2,846,000	2,810,000	57,715	59,904	29,370	30,148	20.3	21.3	10.3	10.7
Louisiana.....	2,120,000	2,118,000	42,270	43,003	23,711	23,254	19.9	20.3	11.2	11.0
Maine.....	845,000	837,000	15,723	15,760	11,024	10,937	18.3	18.8	13.0	13.1
Maryland.....	1,669,000	1,664,000	27,236	27,340	21,182	20,946	16.3	16.4	12.7	12.6
Massachusetts.....	4,375,000	4,326,000	63,001	63,828	50,237	50,580	14.4	14.8	11.5	11.7
Michigan.....	4,731,000	4,680,000	87,446	83,925	51,050	50,442	18.5	17.9	10.8	10.8
Minnesota.....	2,627,000	2,619,000	45,962	45,921	26,247	26,570	17.5	17.5	10.0	10.1
Mississippi.....	2,008,000	2,008,000	48,320	47,863	21,339	21,832	24.1	23.8	10.6	10.9
Missouri.....	3,913,000	3,888,000	57,299	59,185	43,201	46,639	14.6	15.3	11.0	12.1
Montana.....	531,000	531,000	10,029	9,949	6,291	5,617	18.9	18.7	11.8	10.6
Nebraska.....	1,864,000	1,864,000	23,327	25,085	13,181	13,372	12.7	13.4	9.7	9.8
Nevada.....	99,000	98,000	1,423	1,434	1,324	1,297	14.4	14.6	13.4	13.2
New Hampshire.....	502,000	496,000	7,768	7,869	6,532	6,397	15.5	15.9	13.0	12.9
New Jersey.....	4,288,000	4,249,000	84,814	84,841	43,284	43,819	12.7	12.8	10.1	10.3
New Mexico.....	422,000	422,000	13,190	12,769	6,272	6,115	31.3	30.3	14.9	14.5
New York.....	12,890,000	12,846,000	184,344	185,618	148,462	149,088	14.3	14.4	11.5	11.6
North Carolina.....	3,417,000	3,378,000	78,753	79,704	33,485	35,180	23.0	23.6	9.8	10.4
North Dakota.....	700,000	697,000	13,655	14,549	8,860	8,844	19.5	20.9	8.4	8.4
Ohio.....	6,707,000	6,701,000	101,103	100,100	77,356	77,101	15.1	14.9	11.5	11.5
Oklahoma.....	2,509,000	2,491,000	43,691	47,302	21,091	21,373	17.4	19.0	8.4	8.6
Oregon.....	1,008,000	999,000	13,179	13,077	11,430	10,540	13.1	13.1	11.3	10.6
Pennsylvania.....	10,067,000	10,000,000	161,166	160,238	108,555	109,601	16.0	16.0	10.8	11.0
Rhode Island.....	681,000	681,000	10,215	10,349	7,838	7,703	15.0	15.2	11.5	11.3
South Carolina.....	1,840,000	1,821,000	40,598	44,265	20,353	21,312	22.1	24.3	11.1	11.7
South Dakota.....	692,000	692,000	12,850	13,173	6,316	6,455	18.6	19.0	9.1	9.3
Tennessee.....	2,824,000	2,785,000	53,314	52,393	30,002	30,312	18.9	18.8	10.6	10.9
Texas.....	6,077,000	6,038,000	114,721	116,603	61,693	59,731	18.9	19.3	10.1	9.9
Utah.....	515,000	514,000	12,695	12,636	5,066	4,841	24.7	24.6	9.8	9.4
Vermont.....	377,000	374,000	6,591	6,593	4,777	4,878	17.5	17.6	12.7	13.0
Virginia.....	2,637,000	2,604,000	51,487	52,375	30,358	30,559	19.5	20.1	11.5	11.7
Washington.....	1,633,000	1,623,000	22,396	22,540	18,203	17,552	13.7	13.9	11.1	10.8
West Virginia.....	1,816,000	1,802,000	41,774	41,476	18,340	17,941	23.0	23.0	10.1	10.0
Wisconsin.....	2,908,000	2,908,000	52,562	51,419	30,694	30,399	18.1	17.7	10.6	10.5
Wyoming.....	232,000	231,000	4,362	4,565	2,284	2,006	18.8	19.8	9.8	9.1

## Summary of natality and mortality data for the registration areas, 1920-1935

Year	Estimated population of United States	Birth registration area				
		Population		Births		Infant mortality
		Number	Percent of total in United States	Number	Per 1,000 population	
1935.....	127,521,000	127,521,000	100.0	2,155,105	16.9	55.7
1934.....	126,626,000	126,626,000	100.0	2,167,636	17.1	60.1
1933.....	125,770,000	125,770,000	100.0	2,061,232	16.6	58.1
1932.....	124,974,000	119,027,000	95.2	2,074,042	17.4	57.6
1931.....	124,113,000	117,522,000	94.7	2,112,760	18.0	61.6
1930.....	123,091,000	116,556,000	94.7	2,205,958	18.9	64.6
1929.....	121,526,429	115,097,972	94.7	2,169,920	18.9	67.6
1928.....	119,861,607	113,050,663	94.3	2,233,149	19.8	68.7
1927.....	118,196,785	108,575,656	87.6	2,137,636	20.6	64.6
1926.....	116,531,963	89,682,479	77.0	1,856,068	20.7	73.3
1925.....	114,867,141	87,486,096	76.2	1,878,880	21.5	71.7
1924.....	113,202,319	86,256,025	76.2	1,930,614	22.4	70.8
1923.....	111,537,487	80,694,406	72.3	1,792,646	22.2	77.1
1922.....	109,872,675	79,415,841	72.3	1,774,911	22.3	76.2
1921.....	108,207,653	70,738,177	65.4	1,714,261	24.2	75.6
1920.....	106,543,681	63,740,089	59.8	1,508,874	23.7	83.8

## Summary of natality and mortality data for the registration areas, 1920-1935—Con.

Year	Death registration area			
	Population		Deaths	
	Number	Percent of total in United States	Number	Per 1,000 population
1935	127,521,000	100.0	1,392,752	10.9
1934	126,626,000	100.0	1,396,903	11.0
1933	125,770,000	100.0	1,342,106	10.7
1932	120,291,060	96.3	1,308,529	10.9
1931	119,479,000	96.3	1,322,587	11.1
1930	118,472,000	96.2	1,343,356	11.3
1929	116,317,515	95.7	1,386,363	11.9
1928	114,258,516	95.3	1,378,675	12.1
1927	108,177,568	91.5	1,236,949	11.4
1926	104,638,501	90.1	1,285,927	12.3
1925	102,951,999	89.6	1,219,019	11.8
1924	100,032,062	88.4	1,173,990	11.7
1923	97,816,104	87.7	1,195,017	12.2
1922	93,866,240	85.4	1,101,863	11.7
1921	89,102,434	82.3	1,032,000	11.6
1920	87,632,592	82.3	1,142,558	13.0

## DEATHS DURING WEEK ENDED JANUARY 23, 1937

(From the Weekly Health Index, issued by the Bureau of the Census, Department of Commerce)

	Week ended Jan. 23, 1937	Correspond- ing week, 1936
<b>Data from 85 large cities of the United States:</b>		
Total deaths	10,578	11,036
Average for 3 prior years	9,137	—
Total deaths, first 3 weeks of year	32,918	28,290
Deaths under 1 year of age	626	635
Average for 3 prior years	561	—
Deaths under 1 year of age, first 3 weeks of year	1,977	1,679
<b>Data from industrial insurance companies:</b>		
Policies in force	66,544,696	65,483,652
Number of death claims	16,346	14,583
Death claims per 1,000 policies in force, annual rate	12.8	11.6
Death claims per 1,000 policies, 3 weeks of year, annual rate	11.9	11.2

# PREVALENCE OF DISEASE

*No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring*

## UNITED STATES

### CURRENT WEEKLY STATE REPORTS

These reports are preliminary, and the figures are subject to change when later returns are received by the State health officers

Reports for Weeks Ended January 30, 1937, and February 1, 1936

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended Jan. 30, 1937, and Feb. 1, 1936

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended Jan. 30, 1937	Week ended Feb. 1, 1936	Week ended Jan. 30, 1937	Week ended Feb. 1, 1936	Week ended Jan. 30, 1937	Week ended Feb. 1, 1936	Week ended Jan. 30, 1937	Week ended Feb. 1, 1936
<b>New England States:</b>								
Maine.....	3	4	374	1	50	303	0	0
New Hampshire.....			1		12	34	0	0
Vermont.....						204	0	0
Massachusetts.....	5	11			863	513	4	3
Rhode Island.....		2	9		124	100	1	1
Connecticut.....	1	3	984	3	347	71	0	3
<b>Middle Atlantic States:</b>								
New York.....	40	39	1,208	117	296	1,166	7	20
New Jersey.....	10	8	163	10	440	55	5	4
Pennsylvania.....	48	51			84	643	10	2
<b>East North Central States:</b>								
Ohio.....	21	31	731	122	65	150	12	15
Indiana.....	21	29	322	28	13	17	4	1
Illinois.....	32	70	226	23	23	35	7	13
Michigan.....	19	10	83	3	44	59	2	2
Wisconsin.....	2	2	1,227	51	19	124	0	1
<b>West North Central States:</b>								
Minnesota.....	5	3	14	1	34	151	1	4
Iowa.....	4	11	556	2		9	0	2
Missouri.....	20	17	2,000	181	4	24	4	7
North Dakota.....		4	225	4		1	2	0
South Dakota.....	2	3	216		2	31	0	0
Nebraska.....		3	78		2	25	1	0
Kansas.....	9	11	3,640	29	6	18	1	1
<b>South Atlantic States:</b>								
Delaware.....	1	2			97	92	0	0
Maryland.....	17	7	471	42	338	149	4	13
District of Columbia.....	7	19	130	4	32	6	2	4
Virginia.....	45	34			180	66	4	4
West Virginia.....	2	21	236	279	12	5	3	8
North Carolina.....	33	24	34	36	54	17	3	3
South Carolina.....	9	17	827	572	44	10	1	3
Georgia.....	13	13	600	259			3	3
Florida.....	17	8	40	5	7		5	1
<b>East South Central States:</b>								
Kentucky.....		22		62		60		13
Tennessee.....	15	14	653	124		13	5	7
Alabama.....	27	15	466	301	6	33	1	0
Mississippi.....	5	5					0	1

See footnotes at end of table.

*Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended Jan. 30, 1937, and Feb. 1, 1936—Continued*

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended Jan. 30, 1937	Week ended Feb. 1, 1936	Week ended Jan. 30, 1937	Week ended Feb. 1, 1936	Week ended Jan. 30, 1937	Week ended Feb. 1, 1936	Week ended Jan. 30, 1937	Week ended Feb. 1, 1936
<b>West South Central States:</b>								
Arkansas.....	7	3	864	50	3	2	1	2
Louisiana.....	9	20	235	10	4	37	0	0
Oklahoma.....	9	9	505	190	32	1	2	15
Texas.....	50	60	2,435	299	324	70	0	11
<b>Mountain States:</b>								
Montana.....	1	2	3,343	26	4	39	0	1
Idaho.....	2	1	230	4	73	31	0	0
Wyoming.....			30		1	3	0	0
Colorado.....	7	11			3	7	1	1
New Mexico.....	4	9	930	3	26	7	0	3
Arizona.....	1		1,154	125	191	9	1	1
Utah.....	2	2	7		154		0	0
<b>Pacific States:</b>								
Washington.....	13	5	415		69	193	2	0
Oregon.....		3	2,187	29	7	540	1	0
California.....	30	46	9,893	131	50	1,228	11	5
<b>Total.....</b>	<b>571</b>	<b>684</b>	<b>36,742</b>	<b>3,025</b>	<b>4,139</b>	<b>6,351</b>	<b>111</b>	<b>178</b>
<b>First 4 weeks of year.....</b>	<b>2,488</b>	<b>2,985</b>	<b>108,110</b>	<b>11,140</b>	<b>16,688</b>	<b>21,943</b>	<b>542</b>	<b>716</b>

Division and State	Poliomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended Jan. 30, 1937	Week ended Feb. 1, 1936	Week ended Jan. 30, 1937	Week ended Feb. 1, 1936	Week ended Jan. 30, 1937	Week ended Feb. 1, 1936	Week ended Jan. 30, 1937	Week ended Feb. 1, 1936
<b>New England States:</b>								
Maine.....	0	0	21	19	0	0	0	1
New Hampshire.....	0	0	5	9	0	0	0	0
Vermont.....	0	0	10	21	0	1	0	0
Massachusetts.....	0	1	249	228	0	0	0	3
Rhode Island.....	0	0	74	13	0	0	0	0
Connecticut.....	0	0	108	56	0	0	0	0
<b>Middle Atlantic States:</b>								
New York.....	0	1	788	740	3	0	5	5
New Jersey.....	1	2	172	244	0	0	3	2
Pennsylvania.....	1	0	650	490	0	0	7	6
<b>East North Central States:</b>								
Ohio.....	2	0	438	472	8	2	0	4
Indiana.....	0	1	193	229	2	3	0	2
Illinois.....	2	0	551	684	32	6	8	2
Michigan.....	1	0	666	310	0	0	3	1
Wisconsin.....	0	1	348	473	13	5	2	2
<b>West North Central States:</b>								
Minnesota.....	0	1	147	374	5	9	0	1
Iowa.....	0	1	191	186	24	10	1	4
Missouri.....	0	0	234	163	97	3	1	3
North Dakota.....	0	0	29	96	20	7	0	0
South Dakota.....	2	0	116	72	4	16	0	0
Nebraska.....	2	0	70	139	2	45	0	2
Kansas.....	0	1	291	260	11	11	1	2
<b>South Atlantic States:</b>								
Delaware.....	0	0	12	8	0	0	1	0
Maryland.....	0	0	87	82	0	0	1	3
District of Columbia.....	0	0	16	16	0	0	0	1
Virginia.....	1	0	30	40	0	0	8	13
West Virginia.....	0	0	47	37	0	0	3	2
North Carolina.....	0	1	47	32	2	1	9	2
South Carolina.....	0	1	6	5	0	0	2	0
Georgia.....	1	0	16	24	0	0	3	2
Florida.....	0	0	11	13	0	0	1	0

See footnotes at end of table.



*Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended Jan. 30, 1937, and Feb. 1, 1936—Continued*

Division and State	Poliomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended Jan. 30, 1937	Week ended Feb. 1, 1936	Week ended Jan. 30, 1937	Week ended Feb. 1, 1936	Week ended Jan. 30, 1937	Week ended Feb. 1, 1936	Week ended Jan. 30, 1937	Week ended Feb. 1, 1936
<b>East South Central States:</b>								
Kentucky <sup>1</sup>		1		71		0		9
Tennessee <sup>2</sup>	1	0	26	44	0	0	9	6
Alabama <sup>3</sup>	0	1	14	14	2	0	2	2
Mississippi <sup>4</sup>	0	0	4	17	0	0	2	0
<b>West South Central States:</b>								
Arkansas	2	0	7	5	2	4	3	1
Louisiana	1	0	5	17	0	2	4	2
Oklahoma <sup>5</sup>	1	0	22	36	0	0	1	5
Texas <sup>6</sup>	4	0	108	115	2	1	9	8
<b>Mountain States:</b>								
Montana	0	0	35	120	7	9	0	1
Idaho	0	1	39	60	2	0	0	0
Wyoming	0	0	5	131	0	0	0	0
Colorado	0	0	28	213	0	1	0	0
New Mexico	1	0	18	62	0	1	0	1
Arizona	0	0	33	30	0	0	0	0
Utah <sup>7</sup>	0	0	23	72	5	0	0	0
<b>Pacific States:</b>								
Washington	0	1	80	127	10	12	1	3
Oregon	3	0	15	38	18	3	0	1
California	2	0	306	397	4	10	8	0
<b>Total</b>	<b>28</b>	<b>15</b>	<b>6,361</b>	<b>7,113</b>	<b>275</b>	<b>162</b>	<b>98</b>	<b>111</b>
<b>First 4 weeks of year</b>	<b>100</b>	<b>73</b>	<b>23,617</b>	<b>29,330</b>	<b>1,144</b>	<b>863</b>	<b>487</b>	<b>446</b>

<sup>1</sup> New York City only.

<sup>2</sup> Week ended earlier than Saturday.

<sup>3</sup> Typhus fever, week ended Jan. 30, 1937, 26 cases, as follows: North Carolina, 1; Georgia, 9; Florida, 1; Alabama, 5; Texas, 10.

<sup>4</sup> Report for week ended Jan. 30, 1937, not received.

<sup>5</sup> Report incomplete.

<sup>6</sup> Exclusive of Oklahoma City and Tulsa.

## SUMMARY OF MONTHLY REPORTS FROM STATES

The following summary of cases reported monthly by States is published weekly and covers only those States from which reports are received during the current week:

State	Menin- gococ- cus menin- gitis	Diph- theria	Infl- uenza	Mala- ria	Meas- les	Pel- lagra	Polio- mye- litis	Scarlet fever	Small- pox	Ty- phoid fever
<b>October 1936</b>										
Puerto Rico		57	53	1,907	196	4	1	1	0	205
<b>December 1936</b>										
Illinois	24	160	715	6	80		13	1,729	2	26
Kansas	4	44	40		32		12	1,093	50	10
Montana	6	9	197		12	1	2	251	105	5
North Dakota		5	26		1		0	232	47	2
Oregon	6	2	145		29		2	130	108	6
South Dakota	1		38		4		1	271	37	3
Tennessee	6	119	265		34	8	11	174	0	39
Texas	17	367	2,504	803	348	133	14	550	5	78
Virginia	18	121	1,098	5	138	2	1	176	0	27
Washington	2	25	41		88		2	241	16	7

## Summary of monthly reports from States—Continued

October 1936		December 1936—Continued		December 1936—Continued	
	Cases		Cases		Cases
<b>Puerto Rico:</b>		<b>Encephalitis, epidemic or</b>		<b>Septic sore throat:</b>	
Chickenpox.....	8	lethargic—Continued.		Illinois.....	11
Dysentery.....	49	Tennessee.....	1	Kansas.....	2
Filariasis.....	6	Texas.....	3	Montana.....	43
Mumps.....	5	Washington.....	7	Oregon.....	8
Ophthalmia neonatorum.....	3	<b>German measles:</b>		South Dakota.....	1
Puerperal septicemia.....	5	Illinois.....	31	Tennessee.....	5
Tetanus.....	10	Kansas.....	3	Virginia.....	18
Tetanus, infantile.....	5	North Dakota.....	1		
Trachoma.....	1	Tennessee.....	6	<b>Tetanus:</b>	
Whooping cough.....	30	Washington.....	14	Illinois.....	6
		<b>Impetigo contagiosa:</b>		<b>Trachoma:</b>	
<b>December 1936</b>		Kansas.....	6	Illinois.....	52
<b>Actinomycosis:</b>		Oregon.....	43	Oregon.....	2
Kansas.....	1	Tennessee.....	1	South Dakota.....	20
<b>Anthrax:</b>		Washington.....	4	Tennessee.....	10
Washington.....	1	<b>Jaundice:</b>		<b>Trichinosis:</b>	
<b>Chickenpox:</b>		Kansas.....	1	Illinois.....	1
Illinois.....	1,814	Oregon.....	1	<b>Tularaemia:</b>	
Kansas.....	478	<b>Lead poisoning:</b>		Illinois.....	49
Montana.....	238	Illinois.....	1	Kansas.....	20
North Dakota.....	163	<b>Mumps:</b>		Tennessee.....	7
Oregon.....	302	Illinois.....	387	Texas.....	3
South Dakota.....	116	Kansas.....	527	Virginia.....	14
Tennessee.....	218	Montana.....	360	<b>Typhus fever:</b>	
Texas.....	431	North Dakota.....	83	Tennessee.....	1
Virginia.....	265	Oregon.....	56	Texas.....	50
Washington.....	962	South Dakota.....	3	<b>Undulant fever:</b>	
<b>Dengue:</b>		Tennessee.....	50	Illinois.....	8
Texas.....	19	Texas.....	616	Kansas.....	12
<b>Dysentery:</b>		Virginia.....	81	North Dakota.....	1
Illinois (amoebic).....	3	Washington.....	204	Tennessee.....	2
Illinois (amoebic carriers).....	10	<b>Ophthalmia neonatorum:</b>		Texas.....	10
Illinois (bacillary).....	7	Illinois.....	2	Washington.....	1
North Dakota (amoebic).....	1	Tennessee.....	3	<b>Vincent's infection:</b>	
Tennessee (bacillary).....	8	Virginia.....	2	Illinois.....	31
Texas (bacillary).....	55	<b>Paratyphoid fever:</b>		Kansas.....	5
Virginia (amoebic).....	1	Illinois.....	1	North Dakota.....	3
Virginia (bacillary, diarrhoea included).....	35	Texas.....	7	Oregon.....	11
<b>Encephalitis, epidemic or</b>		<b>Puerperal septicemia:</b>		Tennessee.....	40
lethargic:		South Dakota.....	3	<b>Whooping cough:</b>	
Illinois.....	6	<b>Rabies in animals:</b>		Illinois.....	784
Kansas.....	3	Illinois.....	22	Kansas.....	85
		Texas.....	4	Montana.....	33
		Washington.....	18	North Dakota.....	3
		<b>Scabies:</b>		Oregon.....	144
		Kansas.....	1	South Dakota.....	1
		Oregon.....	35	Tennessee.....	69
		Tennessee.....	14	Texas.....	201
				Virginia.....	179
				Washington.....	72

## WEEKLY REPORTS FROM CITIES

City reports for week ended Jan. 23, 1937

This table summarizes the reports received weekly from a selected list of 140 cities for the purpose of showing a cross section of the current urban incidence of the communicable diseases listed in the table. Weekly reports are received from about 700 cities, from which the data are tabulated and filed for reference.

State and city	Diph- theria cases	Influenza		Meas- les cases	Pneu- monia deaths	Scar- let fever cases	Small- pox cases	Tuber- culosis deaths	Ty- phoid fever cases	Whoop- ing cough cases	Deaths, all causes
		Cases	Deaths								
<b>Maine:</b>											
Portland	0	3	1	1	2	4	0	0	0	11	31
<b>New Hampshire:</b>											
Concord	0		3	0	0	0	0	0	0	0	14
Manchester	0		1	2	3	1	0	0	0	0	17
Nashua	0			0	1	0	0		0	0	
<b>Vermont:</b>											
Barre			0	0	0	0	0	0	0	1	3
Burlington	0		0	1	2	0	0	0	0	0	8
<b>Massachusetts:</b>											
Boston	2		2	7	57	40	0	5	0	223	268
Fall River	0		1	2	5	4	0	1	0	4	40
Springfield	0		0	20	3	7	0	1	0	18	27
Worcester	0		0	119	18	4	0	1	0	34	
<b>Rhode Island:</b>											
Pawtucket	0		0	7	0	0	0	0	0	0	19
Providence	1	1	1	144	8	26	0	4	0	17	73
<b>Connecticut:</b>											
Bridgeport	0	68	2	72	2	5	0	3	0	1	33
Hartford	0	106	1	1	11	8	0	0	0	3	56
New Haven	0	92	3	1	1	4	0	0	0	1	54
<b>New York:</b>											
Buffalo	1	30	11	70	29	30	0	4	0	39	173
New York	34	432	58	53	326	259	0	102	2	59	1,936
Rochester	0	10	0	0	12	2	0	2	1	8	71
Syracuse	1		1	16	10	30	0	1	0	42	54
<b>New Jersey:</b>											
Camden	0	18	3	0	8	1	0	1	0	7	41
Newark	0	78	1	182	18	12	0	7	0	30	116
Trenton	1	13	1	1	4	3	0	1	0	2	32
<b>Pennsylvania:</b>											
Philadelphia	12	146	19	14	67	191	0	25	0	95	563
Pittsburgh	2	93	37	0	59	47	0	6	0	28	295
Reading	0		0	3	0	11	0	0	0	39	28
Scranton	0			0		21	0		0	0	
<b>Ohio:</b>											
Cincinnati											
Cleveland	0	274	11	6	33	73	0	9	0	75	225
Columbus	3	5	5	1	10	6	0	2	0	13	83
Toledo	1	9	5	2	14	8	0	5	0	37	105
<b>Indiana:</b>											
Anderson	0		0	1	1	4	0	0	0	0	11
Fort Wayne	1		3	0	8	3	0	0	0	0	33
Indianapolis	0		6	0	37	16	0	3	0	5	135
Muncie	0	41	0	0	4	11	0	1	0	0	18
South Bend	0		1	1	1	2	0	2	0	4	8
Terre Haute	1		0	0	0	2	0	0	0	0	18
<b>Illinois:</b>											
Alton	0	14	0	0	2	8	0	0	0	0	7
Chicago	5	66	13	13	43	193	0	41	3	79	694
Elgin	0		1	0	2	0	0	0	0	10	14
Moline	0	26	0	0	3	0	0	0	0	7	9
Springfield	0	1	0	0	4	2	0	0	0	12	31
<b>Michigan:</b>											
Detroit	16	57	12	5	59	345	0	23	1	82	318
Flint	2		0	4	4	14	0	0	0	1	35
Grand Rapids	0	18	1	6	1	8	0	1	0	19	40
<b>Wisconsin:</b>											
Kenosha	0	4	0	0	3	5	0	0	0	1	13
Madison	0		0	0	3	4	0	1	0	0	21
Milwaukee	0	7	0	1	16	46	0	4	0	28	122
Racine	0	2	2	1	2	9	0	0	0	2	14
Superior	0		1	0	0	4	0	0	0	14	7
<b>Minnesota:</b>											
Duluth	0		1	0	2	6	0	0	0	0	23
Minneapolis	0		8	7	22	24	0	2	0	16	147
St. Paul	0	4	4	4	21	10	0	2	0	32	95

## City reports for week ended Jan. 23, 1937—Continued

State and city	Diph- theria cases	Influenza		Meas- les cases	Pneu- monia deaths	Scar- let fever cases	Small- pox cases	Tuber- culosis deaths	Ty- phoid fever cases	Whoop- ing cough cases	Deaths, all causes
		Cases	Deaths								
<b>Iowa:</b>											
Cedar Rapids	0			0		0	0		0	1	
Davenport	1			0	1	5	0		0	0	
Des Moines	0	223		0		18	0		0	0	53
Sioux City	1			0		11	0		0	0	
Waterloo	1			0		5	0		0	10	
<b>Missouri:</b>											
Kansas City	2	35	9	0	34	45	0	0	0	4	147
St. Joseph	0	42	0	0	10	2	47	0	0	0	33
St. Louis	7	41	19	0	59	36	1	16	0	55	357
<b>North Dakota:</b>											
Fargo	0		0	0	2	1	1	0	0	0	6
Grand Forks	0			0		0	1		0	0	
Minot	0		0	0	0	0	4	0	0	0	6
<b>South Dakota:</b>											
Aberdeen	0			0		8	0		0	0	
Sioux Falls	0			0		3	0		0	0	
<b>Nebraska:</b>											
Omaha	0		2	0	29	11	0	3	0	5	96
<b>Kansas:</b>											
Lawrence	0	65	0	0	2	6	0	0	0	0	5
Topeka	0	188	0		6	6	0	0	0	0	20
Wichita	3	5	0	1	6	3	0	2	0	0	37
<b>Delaware:</b>											
Wilmington	0		0	137	10	1	0	1	0	4	35
<b>Maryland:</b>											
Baltimore	5	139	1	224	45	32	0	18	1	90	276
Cumberland	0	5	0	0	4	3	0	0	0	3	19
Frederick	0		0	1	0	0	0	0	0	0	4
<b>District of Colum- bia:</b>											
Washington	9	143	9	28	35	18	0	16	1	13	206
<b>Virginia:</b>											
Lynchburg	0		0	0	0	0	0	0	0	2	8
Richmond	0		3	0	6	5	0	0	0	0	45
Roanoke	2		0	17	2	3	0	1	0	0	15
<b>West Virginia:</b>											
Charleston	1	9	0	0	3	0	0	0	0	0	18
Wheeling	0	6	0	0	2	1	0	0	0	0	14
<b>North Carolina:</b>											
Gastonia	0			0		0	0		0	0	
Raleigh	0		0	1	4	0	0	2	0	0	22
Wilmington	1		0	1	3	0	0	0	0	1	12
Winston-Salem	0	1	0	0	0	3	0	0	0	0	13
<b>South Carolina:</b>											
Charleston	1	225	2	0	0	0	0	0	0	0	21
Columbia											
Florence	0			0	1	0	0		0	0	9
Greenville	1		0	1	2	0	0	0	0	0	12
<b>Georgia:</b>											
Atlanta	3	209	3	0	12	23	0	1	0	0	71
Brunswick	0	1	1	0	0	0	0	0	0	0	7
Savannah	1	31	1	0	2	1	0	2	0	2	30
<b>Florida:</b>											
Miami	0		1	1	3	0	0	3	0	0	38
Tampa	4	4	1	0	1	1	0	1	0	0	25
<b>Kentucky:</b>											
Ashland	0	34		1	6	5	0	1	0	0	54
Covington	0	1	0	1	5	0	0	2	0	0	27
Lexington											
Louisville											
<b>Tennessee:</b>											
Knoxville	0	323	7	1	4	1	0	0	0	0	24
Memphis	1		5	0	12	3	0	4	1	3	115
Nashville	1		3	0	9	4	0	2	0	0	48
<b>Alabama:</b>											
Birmingham	2	87	2	0	9	1	0	5	0	11	57
Mobile	2	2	2	1	1	0	0	1	0	0	20
Montgomery	0			0		0	0		0	0	
<b>Arkansas:</b>											
Fort Smith	1			0		1	0		0	0	
Little Rock	0	21	0	2	7	0	0	0	0	0	7
<b>Louisiana:</b>											
Lake Charles	0		0	0	1	0	0	0	0	1	8
New Orleans											
Shreveport	1		0	0	13	0	0	2	0	0	53



## City reports for week ended Jan. 23, 1937—Continued

State and city	Diphtheria cases	Influenza		Measles cases	Pneumonia deaths	Scarlet fever cases	Small-pox cases	Tuberculosis deaths	Typhoid fever cases	Whooping cough cases	Deaths, all causes
		Cases	Deaths								
Oklahoma:											
Oklahoma City	1	10	1	0	8	0	0	2	0	4	39
Tulsa	0			1	0	3	0		0	0	
Texas:											
Dallas	6	11	5	3	15	4	0	2	0	4	81
Fort Worth	0		3	66	13	3	0	0	0	0	41
Galveston	0		0	1	1	1	0	2	0	0	17
Houston	2		1	0	15	2	0	4	0	5	56
San Antonio	0		4	5	13	4	0	9	1	1	86
Montana:											
Billings	0	4	1	0	2	1	0	0	0	1	16
Great Falls	0		9	0	2	1	0	0	0	0	19
Helena	0	320	0	1	0	8	0	0	0	0	6
Missoula	0	321	0	0	5	0	0	0	0	2	12
Idaho:											
Boise	0		1	0	2	0	0	0	0	0	16
Colorado:											
Colorado Springs	1		1	0	9	5	0	1	0	0	21
Denver	1		0	3	37	11	0	8	0	38	92
Pueblo	0		3	0	2	7	0	0	0	0	13
New Mexico:											
Albuquerque	0		0	0	4	5	0	4	0	5	14
Utah:											
Salt Lake City	1	70	3	15	3	22	0	0	0	4	54
Nevada:											
Reno											
Washington:											
Seattle	0	331	2	15	17	1	0	6	0	1	125
Spokane	0	4	4	1	5	6	0	0	0	4	42
Tacoma	0		3	0	3	5	0	0	0	0	30
Oregon:											
Portland	0	597	11	3	21	5	0	5	0	4	131
Salem	0	59		0		0			0	3	
California:											
Los Angeles	15	972	14	13	56	41	0	35	0	66	511
Sacramento	2	218	0	3	8	14	1	3	0	0	50
San Francisco	1	720	19	0	39	16	0	14	0	32	308

State and city	Meningococcus meningitis		Polio-myelitis cases	State and city	Meningococcus meningitis		Polio-myelitis cases
	Cases	Deaths			Cases	Deaths	
Massachusetts:				Virginia:			
Boston	0	1	0	Lynchburg	1	1	0
New York:				North Carolina:			
Buffalo	1	0	0	Raleigh	0	1	0
New York	12	9	0	South Carolina:			
Pennsylvania:				Florence	0	1	0
Philadelphia	1	0	0	Greenville	0	1	0
Pittsburgh	3	2	0	Georgia:			
Ohio:				Atlanta	3	0	0
Cleveland	1	0	0	Arkansas:			
Illinois:				Forth Smith	1	0	1
Chicago	3	3	0	Louisiana:			
Springfield	1	1	0	Shreveport	0	1	0
Michigan:				Oklahoma:			
Detroit	2	1	0	Oklahoma City	1	0	0
Missouri:				Texas:			
Kansas City	0	1	0	Dallas	1	1	0
St. Louis	0	1	0	Galveston	1	0	0
North Dakota:				Washington:			
Minot	1	0	0	Seattle	1	0	0
Maryland:				Spokane	1	0	0
Baltimore	4	2	0	California:			
District of Columbia:				Los Angeles	2	0	1
Washington	4	0	0				

Dengue.—Cases: Charleston, S. C., 2.

Encephalitis, epidemic or lethargic.—Cases: Springfield, Mass., 1; New York, 2.

Poliomyelitis.—Cases: Charleston, S. C., 1; Savannah, 1; Mobile, 3; Dallas, 1.

Typhus fever.—Cases: Charleston, S. C., 1; Atlanta, 1; Savannah, 2; Tampa, 1.

## FOREIGN AND INSULAR

### CUBA

*Habana—Communicable diseases—4 weeks ended January 16, 1937.*—During the 4 weeks ended January 16, 1937, certain communicable diseases were reported in Habana, Cuba, as follows:

Disease	Cases	Deaths	Disease	Cases	Deaths
Diphtheria.....	26	1	Scarlet fever.....	1	—
Malaria.....	142	1	Tuberculosis.....	14	4
Polioomyelitis.....	14	—	Typhoid fever.....	123	3

<sup>1</sup> Includes imported cases.

### FINLAND

*Communicable diseases—December 1936.*—During the month of December 1936, cases of certain communicable diseases were reported in Finland as follows:

Disease	Cases	Disease	Cases
Diphtheria.....	549	Scarlet fever.....	1,321
Dysentery.....	15	Smallpox.....	1
Influenza.....	2,666	Typhoid fever.....	43
Paratyphoid fever.....	16	Undulant fever.....	1
Polioomyelitis.....	15		

### PANAMA CANAL ZONE

*Notifiable diseases—October, November, and December, 1936.*—During the months of October, November, and December, 1936, certain notifiable diseases, including imported cases, were reported in the Panama Canal Zone and terminal cities as follows:

Disease	October		November		December	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Chicken pox.....	3	—	7	—	2	—
Diphtheria.....	13	—	23	—	25	—
Dysentery (amoebic).....	14	—	2	3	15	—
Dysentery (bacillary).....	13	7	4	5	18	3
Leprosy.....	1	1	1	—	—	1
Lethargic encephalitis.....	1	—	—	—	—	—
Malaria.....	67	2	69	6	59	4
Measles.....	53	1	68	—	127	—
Meningococcus meningitis.....	—	—	—	—	2	1
Mumps.....	24	—	20	—	50	—
Pneumonia.....	—	24	—	22	—	25
Scarlet fever.....	—	—	—	—	1	—
Tuberculosis.....	—	31	—	23	—	25
Typhoid fever.....	—	—	1	—	—	—
Whooping cough.....	2	—	1	2	5	1

## VIRGIN ISLANDS

*Notifiable diseases—October–December 1936.*—During the months of October, November, and December, 1936, cases of certain notifiable diseases were reported in the Virgin Islands as follows:

Disease	October	November	December	Disease	October	November	December
Diphtheria.....	1	1	—	Mumps.....	—	150	150
Filariasis.....	6	—	—	Pellagra.....	1	—	—
Gonorrhea.....	8	10	3	Schistosomiasis.....	—	—	1
Hookworm disease.....	9	2	1	Syphilis.....	8	1	8
Leprosy.....	2	—	1	Tuberculosis.....	2	2	—
Malaria.....	2	6	62				

## YUGOSLAVIA

*Communicable diseases—December 1936.*—During the month of December 1936, certain communicable diseases were reported in Yugoslavia as follows:

Disease	Cases	Deaths	Disease	Cases	Deaths
Anthrax.....	42	6	Polioomyelitis.....	6	2
Cerebrospinal meningitis.....	17	9	Scarlet fever.....	480	10
Diphtheria and croup.....	1,014	105	Sepsis.....	15	7
Dysentery.....	21	2	Tetanus.....	18	10
Erysipelas.....	335	11	Typhoid fever.....	370	45
Measles.....	518	3	Typhus fever.....	49	7
Paratyphoid fever.....	5	1			

## CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER

NOTE.—A table giving current information of the world prevalence of quarantinable diseases appeared in the PUBLIC HEALTH REPORTS for January 29, 1937, pages 143–155. A similar cumulative table will appear in the PUBLIC HEALTH REPORTS to be issued February 26, 1937, and thereafter, at least for the time being, in the issue published on the last Friday of each month.

## Plague

*Hawaii Territory—Island of Hawaii—Hamakua District—Paauhau sector.*—One rat found on January 6, 1937, four rats found on January 25, and two other rats found on January 28, 1937, all in Paauhau sector, Hamakua District, Island of Hawaii, Hawaii Territory, have been found plague infected.

## Smallpox

*On vessel—American S. S. "Colorado Springs"—Manila.*—One case of smallpox was found in a member of the crew of the American steamship *Colorado Springs* on arrival at Manila, P. I., February 1, 1937, from Shanghai via Nanking, China. All necessary measures were taken.

## Typhus fever

*Iraq—Baghdad.*—During the week ended January 16, 1937, one case of typhus fever was reported at Baghdad, Iraq.

## Yellow fever

**Brazil—Matto Grosso State—Maracaju.**—During the week ended January 2, 1937, two deaths from yellow fever were reported in Maracaju, Matto Grosso State, Brazil.

**Gold Coast—Teshi.**—One fatal case of yellow fever occurring on January 23, 1937, has been reported in Teshi, Gold Coast.

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